

**TWO NEW SPECIES OF *MYRSIDEA* WATERSTON
(PHTHIRAPTERA: AMBLYCERA: MENOPONIDAE) FROM THE
JEWEL-BABLERS (PASSERIFORMES: EUPETIDAE) FROM
NEW GUINEA**

RONALD A. HELLENTHAL AND ROGER D. PRICE

(RAH) Department of Biological Sciences, P.O. Box 369, University of Notre Dame, Notre Dame, IN 46556-0369, U.S.A. (e-mail: ronald.a.hellenthal.1@nd.edu); (RDP) 4202 Stanard Circle, Fort Smith, AR 72903-1906, U.S.A. (e-mail: rpricelice@aol.com)

Abstract.—Two new species of *Myrsidea* are described and illustrated: *M. castanonotae* from the type host *Ptilorrhoea castanonota*, the chestnut-backed jewel-babbler, and *M. leucostictae* from the type host *Ptilorrhoea leucosticta*, the spotted jewel-babbler. These represent the first species of this chewing louse genus described from the Eupetidae.

Key Words: chewing lice, *Myrsidea*, Phthiraptera, Menoponidae, jewel-babblers, Eupetidae

In a continuing survey of the species of the chewing louse genus *Myrsidea* Waterston from the Passeriformes, we here describe and illustrate two new species from hosts within the Eupetidae, the jewel-babblers. A summary of the features of the *Myrsidea* is given in Clay (1966) and Hellenthal and Price (2003); these will not be repeated here but the principal features will be incorporated into the species descriptions. As the *Myrsidea* of various passerine families have been reviewed, it has become apparent that the *Myrsidea* from each host family are restricted to that family. Because this louse genus contains well over 200 specific names (see Price et al. 2003), and probably infests all passerines it is an unrealistically large task to review the entire genus at one time. Thus we continue to follow the only practical course available, that of reviewing the lice by host family.

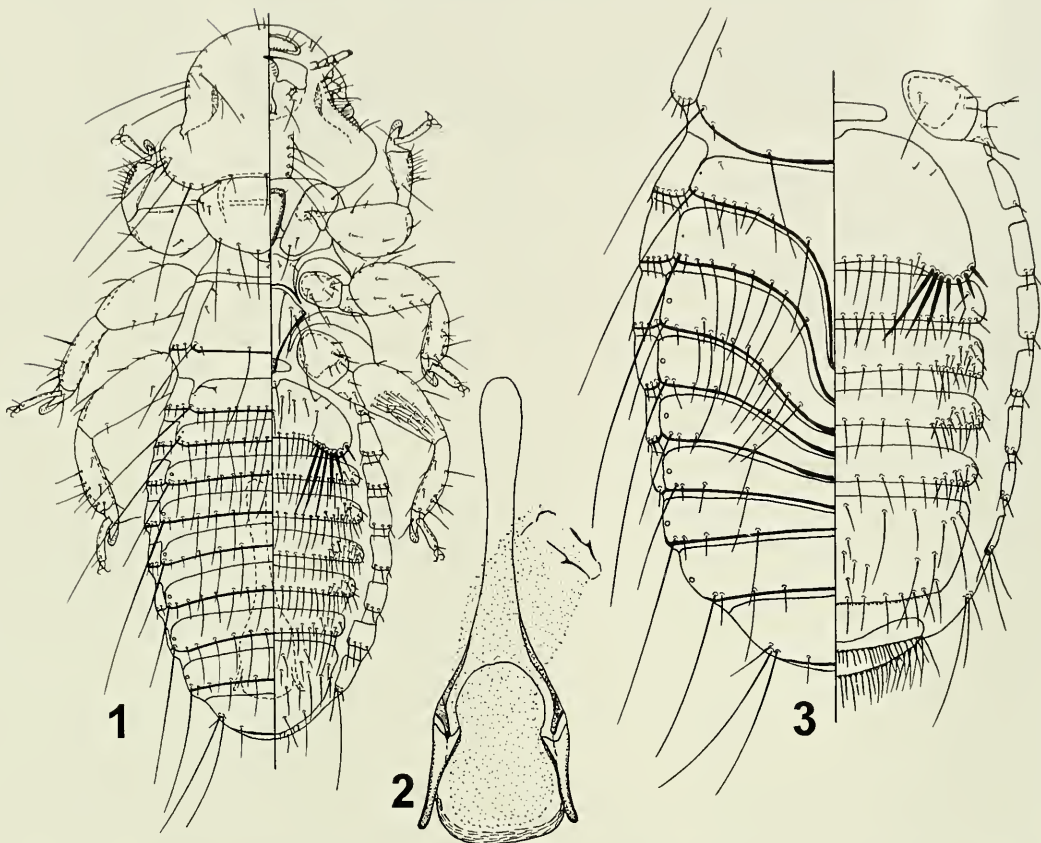
In the following descriptions, all measurements are in millimeters. Abbreviations are TW, temple width; HL, head length; PW, prothorax width; MW, metathorax

width; AWIV, abdomen width at segment IV; TL, total length; ANW, female anus width; and GL, male genitalia length. The host nomenclature below order follows that of Dickinson (2003). The holotypes and paratypes of both new species are in the K. C. Emerson Museum, Oklahoma State University, Stillwater. The specific name for each new species is derived from the species name of type host.

***Myrsidea castanonotae* Hellenthal and
Price, new species**
(Figs. 1–3)

Type host.—*Ptilorrhoea castanonota* (Salvadori), the chestnut-backed jewel-babbler.

Male.—As in Fig. 1. Anterior margin of head evenly rounded, without preocular notch or slit; outer occipital seta much shorter than inner; without ventral spinous process; gula with 5, less often 4, setae; hypopharyngeal sclerites well developed. Pronotum with 6 long setae at posterior margin, 3 short setae at each lateral corner,

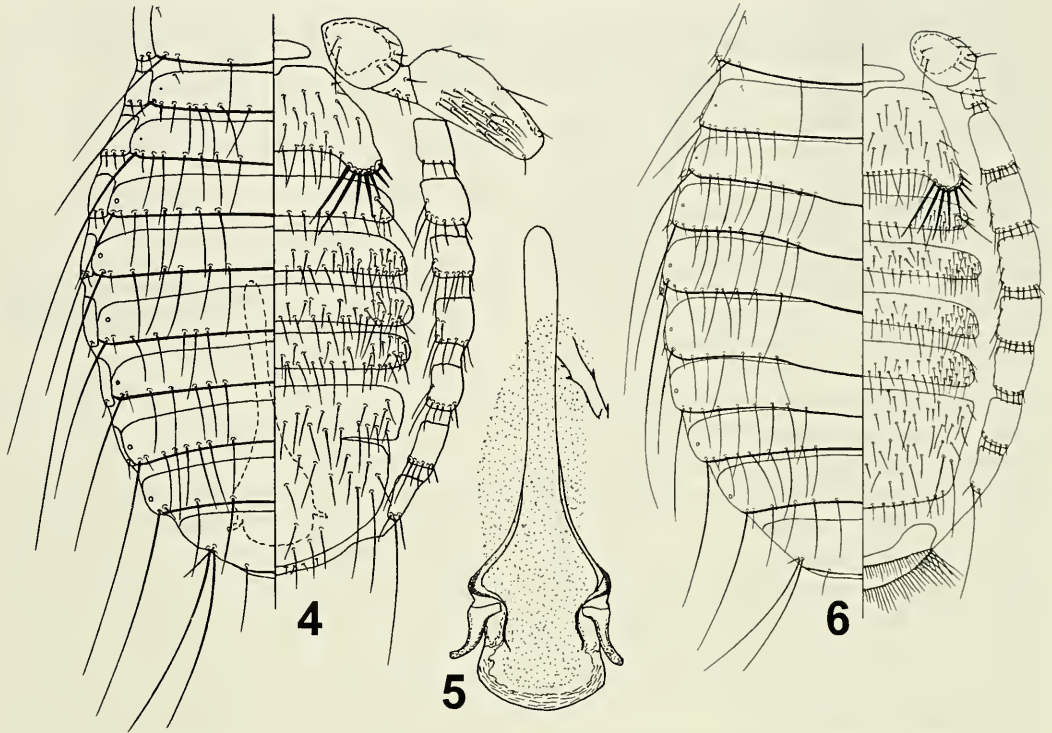


Figs. 1-3. *Myrsidea castanonotae*. 1, Male dorsoventral. 2, Male genitalia. 3, Female dorsoventral metathorax and abdomen.

and no dorsal setae; mesonotum with single pair of minute setae posterior to postnotum; prosternal plate well developed, with single pair of minute anterior setae; metanotal posterior margin and metasternal plate each with 6-8 setae. Femur III with ventral setal brush. Abdomen with undivided tergites; without anterior tergal or pleural setae. Tergal setae, including postspiracular setae: I, 16-20; II-III, 20-22; IV-VII, 14-20; VIII, 10-12. Postspiracular setae very long on I-II, IV, and VII-VIII, shorter on III and V-VI. Sternite I small, without setae; sternite II enlarged, with aster of 6-7 prominent heavy setae at each lateroposterior corner. Sternal setae: II, 15-20 anterior, 17-18 marginal setae in addition to those in asters; III, 37-43; IV-V, 52-62; VI, 49-58; VII, 33-

43; VIII, 17-25. Genitalia (Fig. 2) with slender straight parameres, lightly spiculate sac, and elongate sclerite as shown. Dimensions: TW, 0.43-0.46; HL, 0.31-0.32; PW, 0.28-0.31; MW, 0.41-0.44; AWIV, 0.50-0.51; TL, 1.39-1.46; GL, 0.41-0.46.

Female.—Head and thorax much as for male. Metathorax and abdomen as in Fig. 3. Metanotum with convex posterior margin. Tergite I with extensive slender medioposterior projection, II-VII medially narrowed and displaced as shown, VIII normal. Tergal setae (including postspiracular setae): I-III, 19-28; IV, 9-10; V, 8-9; VI-VIII, 8. Postspiracular setae as for male. Sternal setae: I, 0; II, 4-6 short mostly lateroanterior setae and 16-19 marginal setae in addition to 7-8 setae in each aster; III,



Figs. 4–6. *Myrsidea leucostictae*. 4, Male dorsoventral metathorax and abdomen. 5, Male genitalia. 6, Female dorsoventral metathorax and abdomen.

35–48; IV–V, 43–68; VI, 33–43; VII, 11–17. Subgenital plate with 13–15 marginal, 14–17 anterior setae. Anus oval, without inner setae, and with 34–42 setae in dorsal fringe, 36–45 in ventral fringe. Dimensions: TW, 0.50–0.51; HL, 0.33–0.35; PW, 0.32; MW, 0.54–0.58; AWIV, 0.68–0.73; TL, 1.73–1.77; ANW, 0.23–0.25.

Type material.—Holotype ♀, ex *P. castanonota*, New Guinea: West Sepik, Mt. Somoro, 23 May 1975, 104794; 1 paratype ♂, same as holotype; 1 ♂, 1 ♀ paratypes, same as holotype except 20 May 1975, 104754; 1 ♂, 1 ♀ paratypes, same except Madang Dist., Wanuma, 13 Mar. 1974, 104203.

Remarks.—The female of this new species is readily recognized by the shape of its abdominal tergites and the associated chaetotaxy, the male by its genitalia with the slender straight parameres and genital sac sclerite as in Fig. 2.

***Myrsidea leucostictae* Hellenthal and Price, new species**
(Figs. 4–6)

Type host.—*Ptilorrhhoa leucosticta* (P. L. Sclater), the spotted jewel-babbler.

Male.—Head and thorax as in Fig. 1. Abdomen as in Fig. 4, differing from *M. castanonota* as follows. Metasternal plate with 8–9 setae. Fewer tergal setae: I, 12–16; II–III, 15–18; IV–VII, 14–16; VIII, 8–9. Postspiracular setae shorter on I and longer on III. Sternal setae: II, 26–27 anterior setae, 14–15 marginal in addition to 7 in each lateroposterior aster; III, 21–26; IV–V, 60–67; VI, 56–60. Genitalia (Fig. 5) with short outwardly curved parameres and sac sclerite as shown. Dimensions: AWIV, 0.56–0.57.

Female.—Head and thorax much as for male. Metathorax and abdomen as in Fig.

6. Metanotum with slightly convex posterior margin. Tergites II–VI with small medioposterior convexity, I and VII–VIII straight. Tergal setae (including postspiracular setae): I, 15–16; II–III, 20–26; IV–VII, 16–20; VIII, 12–14. Postspiracular setae as for male. Sternal setae: I, 0; II, 42–48 anterior and 16–18 marginal setae in addition to 7–8 setae in each aster; III, 46–49; IV–V, 90–98; VI, 81–91; VII, 42–56. Subgenital plate with 15–18 marginal, 34–38 anterior setae. Anus oval, without inner setae, and with 46–56 setae in dorsal fringe, 46–49 in ventral fringe. Dimensions: TW, 0.49–0.51; HL, 0.34–0.35; PW, 0.32–0.33; MW, 0.49–0.52; AWIV, 0.76–0.80; TL, 1.78–1.87; ANW, 0.25–0.27.

Type material.—Holotype ♀, ex *P. leucosticta*, New Guinea: Morobe Dist., Moimo, 15 Dec. 1969, BBM-98129; 1 paratype ♂, same as holotype; 1 ♂, 3 ♀ paratypes, same except Wau, Kaide Rd., 12 Aug. 1969; BBM-97632.

Remarks.—The female is recognizable from that of *M. castanonotae* by its lack of modified abdominal tergites and its much

larger number of setae on all abdominal sternites and on tergites IV–VIII. The male is separable by the different shape of the genitalic parameres and by having more anterior setae on sternite II and fewer setae on sternite III.

LITERATURE CITED

- Clay, T. 1966. Contributions towards a revision of *Myrsidea* Waterston. I. (Menoponidae: Mallophaga). Bulletin of the British Museum (Natural History) Entomology 17: 327–395.
- Dickinson, E. C., ed. 2003. The Howard and Moore Complete Checklist of the Birds of the World. 3rd edition. Princeton Univ. Press, Princeton, New Jersey. 1,039 pp.
- Hellenthal, R. A. and R. D. Price. 2003. The genus *Myrsidea* Waterston (Phthiraptera: Menoponidae) from bulbuls (Passeriformes: Pycnonotidae), with descriptions of 16 new species. Zootaxa 354: 1–20.
- Price, R. D., R. A. Hellenthal, and R. L. Palma. 2003. World checklist of chewing lice with host associations and keys to families and genera, pp. 1–448 in Price, R. D., R. A. Hellenthal, R. L. Palma, K. P. Johnson, and D. H. Clayton. The Chewing Lice: World Checklist and Biological Overview. Illinois Natural History Survey Special Publication 24. x + 501 pp.